

CLAIMS

What is claimed is:

1. An apparatus for drilling a horizontal borehole from a vertical wellbore, comprising:
 - a. a drill bit;
 - b. a plurality of hollow segments in the vertical wellbore, one of which is attached to the drill bit; and
 - c. means for driving the drill bit through the hollow segments.
2. The apparatus of claim 1, wherein the segments are stored in an unattached manner within the wellbore and are sequentially attached to one another as the drill bit advance horizontally.
3. The apparatus of claim 2, further including a magazine of stacked segments in the wellbore.
4. The apparatus of claim 3, further including a load cell located at a position in the wellbore at which a horizontal perforation is desired, wherein each segment in the magazine of stacked segments drops into the load cell and is attached to the next adjacent segment as the drill bit horizontally advances.
5. The apparatus of claim 1, further including a drill stem extending through the segments and attached to the drill bit for driving the drill.
6. The apparatus of claim 1, wherein the hollow interior of the segments form a fluid conduit for hydraulic fluid for driving the drill bit.
7. The apparatus of claim 1, wherein the segments are connected in a chain and are carried in a loop in the well bore.
8. The apparatus of claim 7, further including a first guide means near the top of the well bore for supporting and guiding the chain of segments into the wellbore and a

09954891-091801

second guide means adjacent a location in the wellbore where a horizontal perforation is desired for guiding the segments into the horizontal perforation.

9. The apparatus of claim 8, wherein the first guide means is axially movable in the wellbore for keeping the chain of segments in tension.
10. The apparatus of claim 8, wherein the guide means is a pulley.
11. The apparatus of claim 8, wherein the guide means is a sprocket gear designed to engage the chain segments.

09954891-091801
108760-16845660